AMENDMENTS TO THE CLAIMS

Claims 1-5 Cancelled

6. (Previously presented) In an impulse radio, a method of rake receiving, comprising:

receiving a plurality of reflections of an impulse radio signal at a corresponding plurality of rake teeth;

sampling said plurality of reflections to produce a plurality of samples; and

determining at least one figure of merit for one or more of said plurality of reflections dynamically based upon said plurality of samples without considering an expected impulse radio characteristic determined during a rake training period.

7. (Previously presented) The method of claim 6, further comprising:

performing a data demodulation computation based upon the samples and the at least one figure of merit.

8. (Currently amended) The method of claim 7, further comprising:

excluding, during the data demodulation computation, ~~wherein~~ the samples corresponding to at least one of said plurality of reflections ~~are excluded~~.

9. (Currently amended) The method of claim 8, wherein the excluding of the samples corresponding to at least one of said plurality of reflections ~~are excluded~~ is based on at least one of said at least one figure of merit.

10. (Currently amended) The method of claim 7, further comprising:

updating ~~wherein~~ at least one of the at least one figure of merit ~~is updated~~.

11. (Previously presented) The method of claim 10, wherein the data demodulation computation is based upon an updated one of the at least one figure of merit.

12. (Currently amended) The method of claim 6, further comprising:

confining ~~wherein~~ a time offset of at least one rake tooth of said plurality of rake teeth ~~is confined~~ to a corresponding at least one rake tooth placement zone.

13. (Currently amended) The method of claim 12, further comprising:

adjusting ~~wherein~~ the at least one rake tooth placement zone corresponding to said at least one rake tooth ~~is adjusted~~ based upon said at least one figure of merit corresponding to said at least one rake tooth.

14. (Currently amended) The method of claim 6, further comprising:

placing ~~wherein~~ at least one time offset ~~is placed~~ to maximize the energy captured by said at least one rake tooth.

15. (Currently amended) The method of claim 14, further comprising:

determining ~~wherein~~ the at least one time offset ~~is determined~~ dynamically based on samples of said plurality of impulse radio signal reflections at a corresponding one of said at least one rake tooth.

16. (Currently amended) The method of claim 14, further comprising:

determining ~~wherein~~ time offsets for two or more of said plurality of rake teeth ~~are determined~~ in parallel.

17. (Currently amended) The method of claim 6, further comprising:

determining a variance of the samples of said plurality of reflections at a corresponding one of said plurality of rake teeth, wherein the at least one figure of merit is determined based upon the variance of the samples of said plurality of reflections at ~~a~~ the corresponding one of said plurality of rake teeth.

18. (Currently amended) The method of claim 6, further comprising:

determining an approximation of a variance of the samples of said plurality of reflections at a corresponding one of said plurality of rake teeth, wherein the at least one figure of merit comprises ~~an~~ the approximation of the variance of the samples of said plurality of reflections at ~~a~~ the corresponding one of said plurality of rake teeth.

19. (Previously presented) An impulse radio receiver, comprising:

sampling circuitry that samples a plurality of reflections of an impulse radio signal at a plurality of rake teeth to produce a plurality of samples; and

figure of merit determination circuitry that dynamically determines at least one figure of merit based on the plurality of samples without considering an expected impulse radio signal characteristic determined during a rake training period.

20. (Previously presented) The impulse radio receiver of claim 19, further comprising:

demodulation computation circuitry that demodulates data based upon the samples and the at least one figure of merit.

21. (Previously presented) The impulse radio receiver of claim 20, wherein the samples corresponding to at least one of said plurality of reflections are excluded during data demodulation.

22. (Previously presented) The impulse radio receiver of claim 21, wherein the samples corresponding to at least one of said plurality of reflections are excluded based on at least one of said at least one figure of merit.

23. (Previously presented) The impulse radio receiver of claim 21, wherein at least one of the at least one figure of merit is updated.

24. (Previously presented) The impulse radio receiver of claim 23, wherein the data demodulation is based upon an updated one of the at least one figure of merit.

25. (Previously presented) The impulse radio receiver of claim 19, wherein a time offset of at least one rake tooth of said plurality of rake teeth is confined to a corresponding at least one rake tooth placement zone.

26. (Previously presented) The impulse radio receiver of claim 25, wherein the at least one rake tooth placement zone corresponding to said at least one rake tooth is adjusted based upon said at least one figure of merit corresponding to said at least one rake tooth.

27. (Previously presented) The impulse radio receiver of claim 19, wherein at least one time offset is placed to maximize the energy captured by said at least one rake tooth.

28. (Previously presented) The impulse radio receiver of claim 27, wherein the at least one time offset is determined dynamically based on samples of said plurality of reflections at a corresponding one of said at least one rake tooth.

29. (Previously presented) The impulse radio receiver of claim 27, wherein time offsets for two or more of said plurality of rake teeth are determined in parallel.

30. (Previously presented) The impulse radio receiver of claim 19, wherein the at least one figure of merit is determined based upon the variance of the samples of said plurality of reflections at a corresponding one of said plurality of rake teeth.

31. (Previously presented) The impulse radio receiver of claim 19, wherein the at least one figure of merit comprises an approximation of the variance of the samples of said plurality of reflections at a corresponding one of said plurality of rake teeth.

32. (Currently amended) A method of rake receiving in an impulse radio, comprising

receiving a plurality of reflections of an impulse radio signal at a plurality of rake teeth;

sampling said plurality of reflections of the impulse radio signal ~~reflections~~ to produce a plurality of samples;

determining a plurality of figures of merit corresponding to the plurality of rake teeth, each one of said plurality of figures of merit being determined dynamically based upon said plurality of samples without considering an expected impulse radio signal characteristic determined during a rake training period;

determining a best figure of merit of said plurality of figures of merit; and

determining whether to exclude at least one of said plurality of rake teeth from a demodulation computation based upon a comparison of its corresponding one of said plurality of figures of merit to the best figure of merit.

33. (Previously presented) The method of claim 32, further comprising:

performing a demodulation computation based upon samples of those of said plurality of

rake teeth that are not excluded.